U.S.-DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY National Flood Insurance Program

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION	FOR INSURANCE COMPANY USE				
A1. Building Owner's Name James E. Cantrill and Mary E. Cantrill	Policy Number:				
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6337 Bozman Neavitt Road	Company NAIC Number.				
City Neavitt State MD ZIP Code 21652					
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tax Map 39, Parcel 154, a parecl of land described in Liber 1900, Folio 233					
or enclosure(s) within 1.0 foot above adjacent grade 11 within 1.0 foot above c) Total net area of flood openings in A8.b 2200 sq in c) Total net area of flood d) Engineered flood openings? Yes No d) Engineered flood openings?	tached garage 228 sq ft Int flood openings in the attached garage adjacent grade 2 d openings in A9.b 400 sq in enings? Yes No				
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION	ON				
B1. NFIP Community Name & Community Number Talbot unincorporated area - 240066 B2. County Name Talbot	B3. State MD				
B4. Map/Panel Number 24041C0256 B5. Suffix C August 5, 2013 B7. FIRM Panel Effective/Revised Date August 5, 2013 AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 5.4				
☐ FIS Profile ☑ FIRM ☐ Community Determined ☐ Other/Source: B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Designation Date: ☐ OPA	☐ Yes ⊠ No				
SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQU	IRED)				
1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction *A new Elevation Certificate will be required when construction of the building is complete. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: LOYG Vertical Datum: NAVD 1988 Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 NAVD 1988 Cher/Source: Datum used for building elevations must be the same as that used for the BFE. Check the measurement used.					
a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 3.9	⊠ feet ☐ meters				
b) Top of the next higher floor 7.5	⊠ feet ☐ meters				
c) Bottom of the lowest horizontal structural member (V Zones only) N.A	☐ feet ☐ meters				
d) Attached garage (top of slab) <u>3.7</u>	☑ feet ☐ meters				
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) f) Lowest adjacent (finished) grade next to building (LAG) 2.2	☑ feet ☐ meters ☑ feet ☐ meters				
g) Highest adjacent (finished) grade next to building (HAG) 3.0	⊠ feet ☐ meters				
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 2.6	☑ feet ☐ meters				
SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICAT	ION				
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a					
 ☑ Check here if comments are provided on back of form. ☑ Check here if attachments. ☑ Were latitude and longitude in Section A provided by licensed land surveyor? ☑ Yes ☑ No 	STEWELT TO				
Certifier's Name Jefferson Ewell Hubbard License Number 363					
Title Prop Line Surveyor Company Name Lane Engineering, LLC	- SE 130 S				
Address 117 Bay Street City Easton State MD ZIP Code 21601	18 00 STERE 18				
Signature \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11/16/16/00 THE WAY AND 1				

	copy the corresponding information from	Section A.	FOR	NSURANCE COMPANY USE
Building Street Address (including Apt 337 Bozman Neavitt Road	., Unit, Suite, and/or Bldg. No.) or P.O. Route and	Box No.	Policy	Number:
City Neavitt	State MD	ZIP Code 2165	2 Compa	any NAIC Number:
SECTION	I D – SURVEYOR, ENGINEER, OR ARCHIT	ECT CERTIF	ICATION (CONTIN	UED)
Copy both sides of this Elevation Cert	ificate for (1) community official, (2) insurance age	nt/company, an	d (3) building owner.	
Professional Certification. I hereby cer	ery listed in C2 (e) is elec.outlet. Real Time GPS or tify that these documents were prepared by me or ate of Maryland, License No. 363, expiration date in Date 1	under my respe	onsible charge, and th	at I am a duly licensed property
SECTION B - BUILDING ELE	VATION INFORMATION (SURVEY NOT RE	EQUIRED) FO	R ZONE AO AND	ZONE A (WITHOUT BEE)
and C. For Items E1–E4, use natural of the provide elevation information for grade (HAG) and the lowest adjust a) Top of bottom floor (including b) Top of bottom floor (including E2. For Building Diagrams 6–9 with (elevation C2.b in the diagrams) E3. Attached garage (top of slab) is E4. Top of platform of machinery and E5. Zone AO only: If no flood depth	basement, crawlspace, or enclosure) is basement, crawlspace, or enclosure) is permanent flood openings provided in Section A If of the building is feet meters above d/or equipment servicing the building is number is available, is the top of the bottom floor	In Puerto Rico show whether t feet feet feet feet feet feet feet	only, enter meters. the elevation is above meters above meters above (see pages 8–9 of Incompleted HAG) meters above or meters above or ordance with the comp	or below the highest adjacent e or below the HAG. e or below the LAG. structions), the next higher floor below the HAG.
	Unknown. The local official must certify this info			
	F - PROPERTY OWNER (OR OWNER'S F		· · · · · · · · · · · · · · · · · · ·	
	zed representative who completes Sections A, B, ments in Sections A, B, and E are correct to the be			sued or community-issued BFE
roperty Owner's or Owner's Authorize	ed Representative's Name	· · · · · · · · · · · · · · · · · · ·		
ddress	City		State	ZIP Code
ignature	Date		Telephone	
J. 988	Date		Telephone	
J 988	Date		Telephone	☐ Check here if attachme
omments	SECTION G - COMMUNITY INFORM		IONAL)	
comments e local official who is authorized by law		lain managemer	IONAL)	lete Sections A. B. C (or E), and
e local official who is authorized by law his Elevation Certificate, Complete the . The information in Section C v is authorized by law to certify . A community official complete	SECTION G – COMMUNITY INFORM or ordinance to administer the community's floodp a applicable item(s) and sign below. Check the mea was taken from other documentation that has been elevation information. (Indicate the source and da and Section E for a building located in Zone A (witho	lain managemen surement used in a signed and seate of the elevation out a FEMA-issu	IONAL) Intordinance can compount tems G8–G10. In Paled by a licensed surion data in the Community-issued or community-issued.	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect wh ents area below.)
e local official who is authorized by law his Elevation Certificate, Complete the . The information in Section C v is authorized by law to certify A community official complete	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodp e applicable item(s) and sign below. Check the mea- was taken from other documentation that has been elevation information. (Indicate the source and da	lain managemen surement used in a signed and seate of the elevation out a FEMA-issu	IONAL) Intordinance can compount tems G8–G10. In Paled by a licensed surion data in the Community-issued or community-issued.	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect wh ents area below.)
e local official who is authorized by law his Elevation Certificate, Complete the is authorized by law to certify. A community official complete.	SECTION G – COMMUNITY INFORM or ordinance to administer the community's floodp a applicable item(s) and sign below. Check the mea was taken from other documentation that has been elevation information. (Indicate the source and da and Section E for a building located in Zone A (witho	lain managemer surement used in a signed and se ate of the elevation out a FEMA-issumanagement pu	IONAL) Intordinance can compount tems G8–G10. In Paled by a licensed surion data in the Community-issu	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect wh ents area below.) led BFE) or Zone AO.
e local official who is authorized by law his Elevation Certificate. Complete the . The information in Section C v is authorized by law to certify . A community official complete . The following information (Iter	SECTION G – COMMUNITY INFORM or ordinance to administer the community's floodpe applicable item(s) and sign below. Check the mean was taken from other documentation that has been elevation information. (Indicate the source and day do Section E for a building located in Zone A (without the source and the source and the source and the section E for a building located in Zone A (without the source and the section E for a building located in Zone A (without the section E for a	lain management surement used it is signed and set to signed and set to signed and set to signed a FEMA-issumanagement put G6. Date Ce	IONAL) It ordinance can compount items G8–G10. In Paled by a licensed surion data in the Community-issurposes.	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO.
e local official who is authorized by law his Elevation Certificate. Complete the is authorized by law to certify A community official complete. The following information (Iter 4. Permit Number This permit has been issued for: Elevation of as-built lowest floor (in	SECTION G – COMMUNITY INFORM or ordinance to administer the community's floodp e applicable item(s) and sign below. Check the mea- was taken from other documentation that has been elevation information. (Indicate the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E for a building located in Zone A (without the source and da- ded Section E	lain management surement used it is signed and seate of the elevation at FEMA-issumanagement put G6. Date Ce	IONAL) It ordinance can compount tems G8–G10. In Paled by a licensed surion data in the Community-issurposes. It of Compliance in the Compliance of Compliance in the Compli	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect wh ents area below.) led BFE) or Zone AO.
omments e local official who is authorized by law his Elevation Certificate. Complete the is authorized by law to certify. The information in Section C vis authorized by law to certify. A community official complete. The following information (Iter.). 4. Permit Number This permit has been issued for: Elevation of as-built lowest floor (in BFE or (in Zone AO) depth of flood.).	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodp a applicable item(s) and sign below. Check the mea- was taken from other documentation that has been elevation information. (Indicate the source and da ded Section E for a building located in Zone A (without ms G4–G10) is provided for community floodplain G5. Date Permit Issued New Construction Substantial Implication of the building:	lain management surement used it is signed and sente of the elevation a FEMA-issumanagement put G6. Date Ce	IONAL) It ordinance can composite ordinance can composite ordinance can composite ordinance ordinance or community-issurposes. It if icate Of Compliance or community ordinance ordinanc	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO.
omments e local official who is authorized by law his Elevation Certificate. Complete the is authorized by law to certify. The information in Section C vis authorized by law to certify. A community official complete. The following information (Iter.). 4. Permit Number This permit has been issued for: Elevation of as-built lowest floor (in BFE or (in Zone AO) depth of flood.).	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodp a applicable item(s) and sign below. Check the mea- was taken from other documentation that has been elevation information. (Indicate the source and da ded Section E for a building located in Zone A (without ms G4–G10) is provided for community floodplain G5. Date Permit Issued New Construction Substantial Implication of the building:	lain management surement used it is signed and set ate of the elevation at FEMA-issumanagement put G6. Date Ce arovement feet [] feet [IONAL) It ordinance can composite of the second se	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO.
e local official who is authorized by law his Elevation Certificate. Complete the is authorized by law to certify. The information in Section C vis authorized by law to certify. A community official complete. The following information (Iter.). Permit Number. This permit has been issued for: Elevation of as-built lowest floor (in BFE or (in Zone AO) depth of flood). Community's design flood elevation.	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodp a applicable item(s) and sign below. Check the mea- was taken from other documentation that has been elevation information. (Indicate the source and da ded Section E for a building located in Zone A (without ms G4–G10) is provided for community floodplain G5. Date Permit Issued New Construction Substantial Implication of the building:	lain management surement used it in signed and set to the elevation of the	IONAL) It ordinance can composite of the second se	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO. e/Occupancy Issued
e local official who is authorized by law his Elevation Certificate. Complete the is authorized by law to certify. The information in Section C vis authorized by law to certify. A community official complete. The following information (Iter.). Permit Number This permit has been issued for: Elevation of as-built lowest floor (in BFE or (in Zone AO) depth of flood of Community's design flood elevation ocal Official's Name	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodpe applicable item(s) and sign below. Check the mean was taken from other documentation that has been elevation information. (Indicate the source and day described for a building located in Zone A (without mis G4–G10) is provided for community floodplain in G5. Date Permit Issued G5. Date Permit Issued New Construction Substantial Implication of the building: cluding basement) of the building: n: Title	lain management surement used it in signed and set to the elevation of the	IONAL) It ordinance can composite of the second se	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO. e/Occupancy Issued
this Elevation Certificate. Complete the . The information in Section C v is authorized by law to certify A community official complete	SECTION G – COMMUNITY INFORM or or ordinance to administer the community's floodpe applicable item(s) and sign below. Check the mean was taken from other documentation that has been elevation information. (Indicate the source and day described for a building located in Zone A (without mis G4–G10) is provided for community floodplain in G5. Date Permit Issued G5. Date Permit Issued New Construction Substantial Implication of the building: cluding basement) of the building: n: Title	lain management surement used in signed and sente of the elevation of the	IONAL) It ordinance can composite of the second se	lete Sections A, B, C (or E), and uerto Rico only, enter meters. veyor, engineer, or architect whents area below.) led BFE) or Zone AO. e/Occupancy Issued

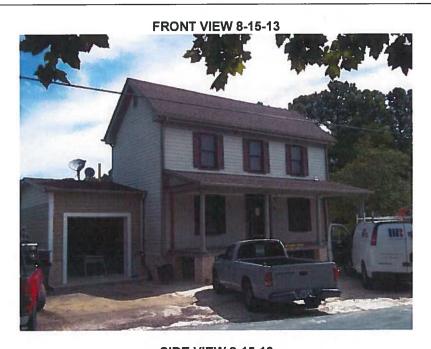
ELEVATION CERTIFICATE, page 3

Building Photographs

See Instructions for Item A6.

h	IMPORTANT: In these spaces, copy the corresponding info	m Section A.	FOR INSURANCE COMPANY USE		
1	Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6337 Bozman Neavitt Road			Policy Number:	
	City Neavitt	State MD	ZIP Code 21652	Company NAIC Number:	

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.





ELEVATION CERTIFICATE, page 4

Building Photographs

Continuation Page

IMPORTANT: In these spaces, copy the corresponding information from Section A.

FOR INSURANCE COMPANY USE

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6337 Bozman Neavitt Road

Policy Number:

City Neavitt

State MD

ZIP Code 21652

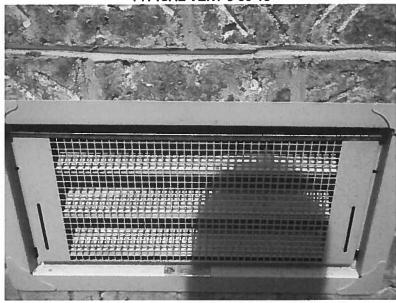
Company NAIC Number:

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.





TYPICAL VENT 5-30-13





ICC-ES Evaluation Report

ESR-2074

Reissued February 1, 2009

This report is subject to re-examination in two years.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 10—SPECIALTIES Section: 10230—Vents

REPORT HOLDER:

SMART VENT[®], INC. 450 ANDBRO DRIVE, SUITE 2B PITMAN, NEW JERSEY 08071 (856) 307-1468 www.smartvent.com eval@smartvent.com

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: FLOODVENT™ MODEL #1540-520; FLOODVENT™ STACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL FLOOD OVERHEAD DOOR MODEL #1540-574; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 International Building Code® (IBC)
- 2006 International Residential Code® (IRC)

Properties evaluated:

- Physical operation
- Water flow

2.0 **USES**

The Smart Vent[®] units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

3.0 DESCRIPTION

3.1 General:

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The AFFV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to

unlatch, allowing the plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel, and each opening provides 76 square inches (49 032 mm²) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm²) of net free area for flood mitigation in the open position.

3.2 Engineered Opening:

The AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent AFFVs must be installed in accordance with Section 4.0.

3.3 Model Sizes:

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure 15³¼ inches wide by 7³¼ inches high (400 by 196.9 mm). The Wood Wall Flood Model #1540-570 and Wood Wall Flood Overhead Door Model #1540-574 units measure 14 inches wide by 8³¼ inches high (355.6 by 222.25 mm). The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units measure 16 inches wide by 16 inches high (406.4 by 406.4 mm).

3.4 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with ¹/₄-inch-by-¹/₄-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm²) of net free area to supply natural ventilation. The SmartVENT™ Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm²) of net free area to supply natural ventilation. Other AFFVs recognized in this report do not offer natural ventilation.

4.0 INSTALLATION

SmartVENT® and FloodVENT™ are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. The mounting straps allow mounting in wood, masonry and concrete walls up to 12 inches (305 mm) thick. In order to

compty with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area
- With a minimum of one AFFV for every 200 square feet (18.6 m²) of enclosed area, except that the SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 must be installed with a minimum of one AFFV for every 400 square feet (37.2 m²) of enclosed area.
- Below the base flood elevation
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

5.0 CONDITIONS OF USE

The Smart Vent® AFFVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Smart Vent[®] AFFVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.
- 5.2 The Smart Vent® AFFVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Automatic Foundation Flood Vents (AC364), dated October 2007.

7.0 IDENTIFICATION

The Smart VENT[®],models recognized in this report must be identified by a label bearing the manufacturer's name (Smart Vent, Inc.), the model number, and the evaluation report number (ESR-2074).

